

WHAT IS CLAIMED IS:

1. An image data conversion apparatus for converting transmitted compressed image data to image data of a different format and displaying the converted image data on a display apparatus, comprising:

a first signal processing unit for receiving and decoding said compressed image data;

a recording unit for recording said decoded image data, said recording unit reading out said image data one line by one line at a scanning line period of said display apparatus under control of said first signal processing unit; and

a second signal processing unit for converting image data read out of said recording unit to image data of a screen size of said display apparatus.

2. An image data conversion apparatus according to claim 1, wherein said first signal processing unit includes a decimation processing section for decimating said decoded image data to eliminate certain lines from said decoded image data so that image data of a same number of lines as that of the display apparatus be read out from said recording unit.

3. An image data conversion apparatus according to claim 1, wherein said first signal processing unit includes a central processing unit (CPU).

4. An image data conversion apparatus according to claim 3, wherein said CPU includes an expansion

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processing section for expanding said inputted compressed image data.

5. An image data conversion apparatus according to claim 2, wherein said decoded image data from said first signal processing unit is of CIF type.

6. An image data conversion apparatus according to claim 5, wherein a size of the image to be displayed on said display apparatus is SDTV.

7. An image data conversion apparatus according to claim 6, wherein said recording unit eliminates data of every sixth line of said decoded image data of CIF type.

8. An image data conversion apparatus according to claim 7, wherein each time data of one line is read out from said recording unit, said second signal processing unit adds said read data and data one line before at a predetermined ratio to generate image data of one line to be displayed on said display apparatus.

9. An image data conversion apparatus according to claim 1, wherein said inputted compressed data is of MPEG-4 compression type image data.

10. An image data conversion apparatus for converting compressed image data transferred in units of a field to image data of a different format so as to be displayed on a display apparatus, comprising:

a first signal processing unit for receiving said compressed image data in units of a field and decoding said compressed image data;

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a recording unit for recording said decoded image data, said recording unit reading out said image data one line by one line at a scanning line period of said display apparatus under control of said first signal processing unit; and

a second signal processing unit for converting image data read out of said recording unit to image data of a screen size of said display apparatus, said second signal processing unit including an inverse converter for converting said image data of each field to an odd field image data and an even field image data.

11. An image data conversion apparatus according to claim 10, wherein a type of image read out from said recording unit is CIF, and a size of image to be displayed on said display apparatus is SDTV.

12. An image data conversion apparatus according to claim 10, wherein said inverse converter includes a line memory by which said image data of each line read out from said recording unit is delayed by one line, and a digital filter that receives image data of a current line and said image data read one line before from said line memory, multiplies said both data by predetermined conversion coefficients, respectively, and then adds those data.

13. An image data conversion apparatus according to claim 10, wherein said first signal processing unit includes a decimation processing section that decimates

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the decoded image data to eliminate predetermined lines from the decoded image data so that image data having a same number of lines as that of an odd field or an even field of said display apparatus is read out from said recording unit.

14. An image data conversion apparatus according to claim 13, wherein said predetermined lines eliminated from said image data are same lines for the odd and even fields.

15. An image data conversion apparatus according to claim 10, further comprising a bus for connecting said first and second signal processing units, wherein said recording unit is connected to said bus, and wherein said image data from said first signal processing unit is once stored in said recording unit and then read at every line so as to be supplied to said second signal processing unit.

16. An image data conversion method for converting transmitted compressed image data to image data of a different format and displaying the converted image data on a display apparatus, comprising the steps of:

decoding said compressed image data;

recording said decoded image data;

reading said recorded image data one line by one line at a scanning line period of said display apparatus; and

converting image data read out of said

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recording unit to image data of a screen size of said display apparatus.

17. An image data conversion method according to claim 16, wherein said step of reading includes decimating said decoded image data to eliminate predetermined lines so that image data having the same number of lines as that of said display apparatus is read out.

18. An image data conversion method according to claim 17, wherein said image data read out is of CIF type.

19. An image data conversion method according to claim 17, wherein said image data displayed on said display apparatus is of SDTV type.

20. An image data conversion method according to claim 18, wherein said step of reading includes decimating said decoded image data of CIF type to remove every sixth line of said decoded image data of CIF type.

21. An image data conversion method according to claim 20, wherein said step of converting includes, each time data of one line is read, adding said read data and data one line before at a predetermined ratio to thereby produce one line of image data to be displayed on said display apparatus.

22. An image data conversion method according to claim 16, wherein said compressed image data is of CIF type, said screen size of said display apparatus is

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SDTV having each frame constituted by odd and even fields, and said step of converting includes converting said read image data of CIF type to image data of odd field, and then to image data of even field.

23. An image data conversion method according to claim 22, wherein said step of converting includes delaying each line of said read image data by one line period by storing said line in a line memory, multiplying image data of a current line and image data one line before by predetermined conversion coefficients, respectively, and adding said multiplied data in a digital filter.

24. An image data conversion method according to claim 22, wherein said step of reading includes decimating said decoded image data to remove predetermined lines so that image data having a same number of lines as that of an odd field or an even field of said display apparatus is generated.

25. An image data conversion method according to claim 24, wherein said predetermined lines removed from said decoded image are same lines for the odd and even fields.

26. An image data conversion method according to claim 22, wherein said decoded image data is once stored in a recording unit and then read line by line.

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